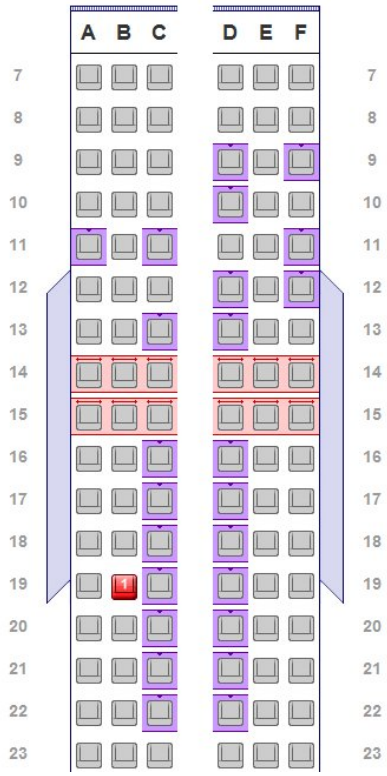
As a team member of FU airlines:

Data Structure: 2D array



Customer Books flight and identifies if they want to pay extra to select their seat

Prompt input text, "Do you want to pay to select your seat?"

If **yes** - Customer pays extra and chooses their seat.

Customer views the 2d array with Xs and Os marking vacant and occupied

Customer Enters the row and seat selection – total occupied seats variable counts up the number of seats

If **no** – Customer does not pay extra, and are assigned a seat 24 hours prior to departure – total occupied seats variable counts up the number of seats

24 hrs prior – the plane is filled, filling every vacant seat from back to front, left to right in the order they were purchased

Queue data structure to keep track of seats purchased – customer info

If total occupied seats counter variable is equal to the total number of seats in the plane, show "Flight sold out"